ABSTRACT OF THE DISCLOSURE

An ANFO explosive composition includes a mixture of ammonium nitrate particles, an organic combustible fuel, and a chemical coupling agent having an aliphatic portion and an epoxy group. The chemical coupling agent may be selected from the group consisting of an epoxidized oil, an ester derivative of epoxidized oil and mixtures thereof. The use of such chemical coupling agents and a method of producing the ANFO explosive composition is also disclosed.